

# hp StorageWorks Business Copy EVA/MA/EMA Host Agent v2.2 for HP-UX

**Product Version: 2.2** 

Fourth Edition (October 2003)

Part Number: T3032–98103

The HP StorageWorks "Business Copy (BC) for enterprise virtual array (EVA), modular array (MA), and enterprise modular array (EMA)" is the new name for the "Enterprise Volume Manager (EVM)" software.

This document summarizes features and characteristics of the HP StorageWorks Business Copy Host Agent v2.2 for HP-UX release that are not covered elsewhere in the documentation set.



#### © Copyright 1999–2003 Hewlett-Packard Development Company, L.P.

Hewlett-Packard Company makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

This document contains proprietary information, which is protected by copyright. No part of this document may be photocopied, reproduced, or translated into another language without the prior written consent of Hewlett-Packard. The information contained in this document is subject to change without notice.

UNIX® is a registered trademark of The Open Group.

Hewlett-Packard Company shall not be liable for technical or editorial errors or omissions contained herein. The information is provided "as is" without warranty of any kind and is subject to change without notice. The warranties for Hewlett-Packard Company products are set forth in the express limited warranty statements for such products. Nothing herein should be construed as constituting an additional warranty.

Printed in the U.S.A.

Business Copy EVA/MA/EMA Host Agent v2.2 for HP-UX Release Notes Fourth Edition (October 2003)
Part Number: T3032–98103

#### **About this Document**

This section describes the content reflected in this document, including:

- Release Notes Information, page 3
- Intended Audience, page 3
- Business Copy Documentation, page 3
- Business Copy Product Updates, page 3

#### Release Notes Information

These Release Notes cover the following BC topics:

- Hardware and Software Requirements, page 4
- Limitations and Known Issues, page 5

#### Intended Audience

This document is intended for customers who purchased BC v2.2 or are now updating these environments to BC v2.2, and for HP authorized service providers responsible for installing, configuring, and maintaining systems that include BC software.

#### **Business Copy Documentation**

BC documentation includes documents distributed through an initial purchase of BC v2.2 (contained in a BC documentation kit) and through a Web release of BC updates. Refer to the *HP StorageWorks Business Copy EVA/MA/EMA v2.2 Read Me First* (T3032-99101) or *HP StorageWorks Business Copy EVA/MA/EMA v2.2 Update Read Me First* (AA–RQ70G–TE) for a list of these documents and document part numbers.

Visit the BC product page website (<a href="http://h18000.www1.hp.com/products/storage/software/bizcopyeva/index.html">http://h18000.www1.hp.com/products/storage/software/bizcopyeva/index.html</a> for all available BC documentation (except the BC online Help & User Guide).

# **Business Copy Product Updates**

BC product updates, if available, are located at the BC software and drivers page website:

http://h18000.www1.hp.com/products/storage/software/bizcopyeva/index.html.

# Hardware and Software Requirements

The following sections identify hardware and software requirement changes for this BC host agent. Topics include:

- Operating System Version Support, page 4
- Cluster Support, page 4
- Secure Path Requirements, page 4
- HBA, Firmware, and Driver Requirements, page 4

### **Operating System Version Support**

The BC v2.2 Solaris Host Agent supports the following HP-UX Unix versions:

- HP-UX11.11
- HP-UX 11.23(64-bit, Itanium systems only)

# **Cluster Support**

The BC v2.2 HP-UX host agent is supported in Service Guard environments. The following condition applys to this support:

The host agent is not cluster aware. If the cluster node running the host agent fails during the execution of a job, that job will fail.

#### Secure Path Requirements

The BC v2.2 host agent requires the presence of Secure Path and is not supported in single-path or single HBA environments. The following Secure Path version is supported:

Secure Path v3.0C

### HBA, Firmware, and Driver Requirements

HBA, firmware, and driver requirements are listed in Table 1.

Table 1: HBA, Firmware, and Driver Requirements

Vendor	HBA model	Firmware	Driver
HP	A5158A	11.11.09+	latest
	A6795A	11.11.09+	

#### Limitations and Known Issues

This section is an extension of a similar section in the HP StorageWorks Business Copy EVA/MA/EMA v2.2 Network Administration Guide (T3032–96101) and can help avoid problems while using BC v2.2. Limitations and known issues include the following topics:

- Replication and the UNMOUNTVGSOURCE Variable, page 5
- UNIX OSs with Netscape Browsers and JRE 1.4.0x, page 6
- Maximum LUN Values for HP-UX, page 6
- Replicated Volume Groups cannot be Mounted on Different OS Versions, page 7
- Mounting Multiple Raw Logical Volumes per Volume Group, page 7
- Mulitple Jobs that Try to Replicate the Same Volume Group, page 7
- Run updatehost.sh on HP-UX if the Layout or Capacity of any LVs in a VG is Changed, page 7
- LUNWWID Error Message, page 8
- Postinstallation Best-Practices, page 8

### Replication and the UNMOUNTVGSOURCE Variable

When the UNMOUNTVGSOURCE variable is set to true, BC jobs cannot Description: replicate:

- A Volume Group (VG) by the VG name; the job must snap a VG member (logical volume) by name.
- A raw VG.

This problem applies only to the following OSs: HP-UX and IBM AIX.

Indication:

Error The BC job that contains the VG name will fail when the job reaches the FREEZE step. The Job Details page for the failed job indicates Remote spawn request has failed in the blue status bar.

Resolution/ Workground:

To replicate a VG, select one of the VG members (logical volumes/mount points) within the VG to be replicated. This selection method will replicate each of the logical volumes that comprise the VG.

This issue did not exist in the EVM V2.0x host agent version. If a BC job containing a VG name fails, check to see if the failure occurred due to the UNMOUNTVGSOURCE variable setting as stated above. The BC job may require modification to allow the job to run without error.

This replication bug will be corrected in a future release.

#### UNIX OSs with Netscape Browsers and JRE 1.4.0x

Description:

Sporadically, UNIX® OSs with Netscape browsers and JRE versions 1.4.0x may experience a problem entering data in specific fields of the Job Create page. This intermittent problem is referenced as a known bug in the Sun Microsystems Bug Database (# 4767070).

Indication:

*Error* Inability to insert text in the **Name**, **Owner**, and **Category** fields of the Job Create page.

Resolution/ Workaround:

A fix is in JRE 1.4.1\_02. A workaround for prior JRE versions involves using the mouse to change focus away from the current application to another window, and then returning to the current application.

In BC, for example, the user can click *focus* away from the applet area in BC by:

- Clicking in the upper header area of the BC GUI, and then
- Clicking back within the applet area to regain *focus* on the text fields.

#### Maximum LUN Values for HP-UX

Description:

The default configuration of the BC Host Agent for HP-UX supports 8 LUNs (0 to 7) per target. With the default setting, BC will not create LUNs outside this range. The implication is that, if LUNs in this range are already in use by other devices, BC jobs may fail.

Error

No suitable LUN could be chosen

Indication:

Resolution/ Workground:

There is no practical limit to the LUN range that the BC host agent can support. The 0 to 7 limit was chosen due to the fact that LUNs outside this range are not supported by many combinations of OS version, array controller, host mode, and Secure Path version. The BC-imposed limit may be increased to the desired level by changing the MAXLUN parameter in the osvm.ini file located in the

../opt/CPQevm/bin directory. It is the user's responsibility to ensure that the chosen MAXLUN value is supported by the operating system, array controller, HBA, driver, and Secure Path.

# Replicated Volume Groups cannot be Mounted on Different OS Versions

A clone or snapshot copy of an HP-UX v11.11 volume group cannot be mounted on an HP-UX 11.23 host, and vice versa.

### Mounting Multiple Raw Logical Volumes per Volume Group

Description: A single raw mount will make all logical volumes in the volume group available.

Trying to mount multiple raw LVs per volume group will cause problems during job execution and undo. This limitation applies only to raw logical volumes (those

that do not contain filesystems).

Error None

Indication:

Resolution/ Don't create BC jobs that try to mount more than one raw LV per volume group.

Workaround:

### Mulitple Jobs that Try to Replicate the Same Volume Group

Description: Part of the process of replicating an HP-UX volume group involves placing the

volume group that is being copied into a consistent state. Business Copy does this through the use of a utility called *VGfreeze*. If multiple VGfreeze processes are executed against the same volume group at the same time, they will conflict and

one or more of them will fail, causing the Business Copy job to fail.

Error None

Indication:

Resolution Don't run more than one job at the same time that tries to replicate the same

Workaround: volume group.

# Run updatehost.sh on HP-UX if the Layout or Capacity of any LVs in a VG is Changed

Description: If the configuration of any of the volume groups on the HP-UX host changes in

terms of the physical disks that comprise the volume group or the logical volumes that are contained in the volume group, it will be necessary to update the BC

configuration files.

Error None

Indication:

Resolution/ Run the *updatehost.sh* script located in the ../opt/CPQevm/bin directory.

Workaround:

### **LUNWWID Error Message**

Description: This error was seen occasionally during the qualification of the BC Host Agent

and is caused by a problem with SANworks Secure Path. This problem affects mount operations and prevents the HP-UX host from seeing the BCV devices. It is

necessary to reboot the host to recover from this problem.

Error Device with LUNWWID: ...-xxx wasn't found in system

Indication:

Resolution/ Reboot the host computer to recover from this problem.

Workaround:

#### Postinstallation Best-Practices

All open browser windows must be closed and then the browser reopened before browsing to the SMA software, after any of the following installations.

- BC host agent v2.2
- Any browser or new browser version
- A JRE or a new JRE version

Due to a bug in Netscape, systems using HP-UX must be rebooted after a Netscape and/or a JRE installation in order for Netscape to register the JRE.

If problems between the browser and Java applets (such as the lack of a display in the lower portion of the BC screen) persist after closing and reopening the browser (or rebooting), the browser cache or Java plug-in cache may be responsible.

To clear the cache in Internet Explorer, use the following procedures:

- 1. Choose **Tools>Internet** Options.
- 2. From the **General** tab, under **Temporary Internet Files**, click **Delete Files**.
- 3. In the **Delete Files** window, click **OK**. (There is no need to check the **Delete** all offline content option.)

To clear the cache in Netscape, use the following procedures:

1. Choose **Edit>Preferences**.

- 2. In the navigation pane, choose **Advanced>Cache**.
- 3. Click both Clear Memory Cache and Clear Disk Cache.
- 4. Click **OK**.

To clear the cache in the Java plug-in, use the following procedures:

- 1. Open the Java plug-in console.
- 2. From the Cache tab, click Clear JARCache.
- 3. Close the Java plug-in console.